

SEQUENCE LISTING

<110> Kenneth W. Dobie
Susan M. Freier

<120> MODULATION OF ACE2 EXPRESSION

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Met Ser Ser Ser

1

tcc tgg ctc ctt ctc agc ctt gtt gct gta act gct gct cag tcc acc 163

Ser Trp Leu Leu Leu Ser Leu Val Ala Val Thr Ala Ala Gln Ser Thr

5

10

15

20

att gag gaa cag gcc aag aca ttt ttg gac aag ttt aac cac gaa gcc 211

Ile Glu Glu Gln Ala Lys Thr Phe Leu Asp Lys Phe Asn His Glu Ala

25

30

35

gaa gac ctg ttc tat caa agt tca ctt gct tct tgg aat tat aac acc 259

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| aat att act gaa gag aat gtc caa aac atg aat aat gct ggg gac aaa | 307 |
| Asn Ile Thr Glu Glu Asn Val Gln Asn Met Asn Asn Ala Gly Asp Lys | |
| 55 60 65 | |
| tgg tct gcc ttt tta aag gaa cag tcc aca ctt gcc caa atg tat cca | 355 |
| Trp Ser Ala Phe Leu Lys Glu Gln Ser Thr Leu Ala Gln Met Tyr Pro | |
| 70 75 80 | |
| cta caa gaa att cag aat ctc aca gtc aag ctt cag ctg cag gct ctt | 403 |
| Leu Gln Glu Ile Gln Asn Leu Thr Val Lys Leu Gln Leu Gln Ala Leu | |
| 85 90 95 100 | |
| cag caa aat ggg tct tca gtg ctc tca gaa gac aag agc aaa cgg ttg | 451 |
| Gln Gln Asn Gly Ser Ser Val Leu Ser Glu Asp Lys Ser Lys Arg Leu | |
| 105 110 115 | |
| aac aca att cta aat aca atg agc acc atc tac agt act gga aaa gtt | 499 |
| Asn Thr Ile Leu Asn Thr Met Ser Thr Ile Tyr Ser Thr Gly Lys Val | |
| 120 125 130 | |
| tgt aac cca gat aat cca caa gaa tgc tta tta ctt gaa cca ggt ttg | 547 |
| Cys Asn Pro Asp Asn Pro Gln Glu Cys Leu Leu Leu Glu Pro Gly Leu | |
| 135 140 145 | |
| aat gaa ata atg gca aac agt tta gac tac aat gag agg ctc tgg gct | 595 |
| Asn Glu Ile Met Ala Asn Ser Leu Asp Tyr Asn Glu Arg Leu Trp Ala | |
| 150 155 160 | |
| tgg gaa agc tgg aga tct gag gtc ggc aag cag ctg agg cca tta tat | 643 |
| Trp Glu Ser Trp Arg Ser Glu Val Gly Lys Gln Leu Arg Pro Leu Tyr | |
| 165 170 175 180 | |
| gaa gag tat gtg gtc ttg aaa aat gag atg gca aga gca aat cat tat | 691 |
| Glu Glu Tyr Val Val Leu Lys Asn Glu Met Ala Arg Ala Asn His Tyr | |
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| gag gac tat ggg gat tat tgg aga gga gac tat gaa gta aat ggg gta | 739 |
| Glu Asp Tyr Gly Asp Tyr Trp Arg Gly Asp Tyr Glu Val Asn Gly Val | |
| 200 205 210 | |
| gat ggc tat gac tac agc cgc ggc cag ttg att gaa gat gtg gaa cat | 787 |
| Asp Gly Tyr Asp Tyr Ser Arg Gly Gln Leu Ile Glu Asp Val Glu His | |
| 215 220 225 | |
| acc ttt gaa gag att aaa cca tta tat gaa cat ctt cat gcc tat gtg | 835 |
| Thr Phe Glu Glu Ile Lys Pro Leu Tyr Glu His Leu His Ala Tyr Val | |
| 230 235 240 | |
| agg gca aag ttg atg aat gcc tat cct tcc tat atc agt cca att gga | 883 |
| Arg Ala Lys Leu Met Asn Ala Tyr Pro Ser Tyr Ile Ser Pro Ile Gly | |
| 245 250 255 260 | |
| tgc ctc cct gct cat ttg ctt ggt gat atg tgg ggt aga ttt tgg aca | 931 |
| Cys Leu Pro Ala His Leu Leu Gly Asp Met Trp Gly Arg Phe Trp Thr | |
| 265 270 275 | |
| aat ctg tac tct ttg aca gtt ccc ttt gga cag aaa cca aac ata gat | 979 |
| Asn Leu Tyr Ser Leu Thr Val Pro Phe Gly Gln Lys Pro Asn Ile Asp | |
| 280 285 290 | |
| gtt act gat gca atg gtg gac cag gcc tgg gat gca cag aga ata ttc | 1027 |
| Val Thr Asp Ala Met Val Asp Gln Ala Trp Asp Ala Gln Arg Ile Phe | |
| 295 300 305 | |
| aag gag gcc gag aag ttc ttt gta tct gtt ggt ctt cct aat atg act | 1075 |
| Lys Glu Ala Glu Lys Phe Phe Val Ser Val Gly Leu Pro Asn Met Thr | |
| 310 315 320 | |
| caa gga ttc tgg gaa aat tcc atg cta acg gac cca gga aat gtt cag | 1123 |
| Gln Gly Phe Trp Glu Asn Ser Met Leu Thr Asp Pro Gly Asn Val Gln | |
| 325 330 335 340 | |
| aaa gca gtc tgc cat ccc aca gct tgg gac ctg ggg aag ggc gac ttc | 1171 |
| Lys Ala Val Cys His Pro Thr Ala Trp Asp Leu Gly Lys Gly Asp Phe | |
| 345 350 355 | |

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| agg atc ctt atg tgc aca aag gtg aca atg gac gac ttc ctg aca gct | 1219 |
| Arg Ile Leu Met Cys Thr Lys Val Thr Met Asp Asp Phe Leu Thr Ala | |
| 360 365 370 | |
| cat cat gag atg ggg cat atc cag tat gat atg gca tat gct gca caa | 1267 |
| His His Glu Met Gly His Ile Gln Tyr Asp Met Ala Tyr Ala Ala Gln | |
| 375 380 385 | |
| cct ttt ctg cta aga aat gga gct aat gaa gga ttc cat gaa gct gtt | 1315 |
| Pro Phe Leu Leu Arg Asn Gly Ala Asn Glu Gly Phe His Glu Ala Val | |
| 390 395 400 | |
| ggg gaa atc atg tca ctt tct gca gcc aca cct aag cat tta aaa tcc | 1363 |
| Gly Glu Ile Met Ser Leu Ser Ala Ala Thr Pro Lys His Leu Lys Ser | |
| 405 410 415 420 | |
| att ggt ctt ctg tca ccc gat ttt caa gaa gac aat gaa aca gaa ata | 1411 |
| Ile Gly Leu Leu Ser Pro Asp Phe Gln Glu Asp Asn Glu Thr Glu Ile | |
| 425 430 435 | |
| aac ttc ctg ctc aaa caa gca ctc acg att gtt ggg act ctg cca ttt | 1459 |
| Asn Phe Leu Leu Lys Gln Ala Leu Thr Ile Val Gly Thr Leu Pro Phe | |
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| act tac atg tta gag aag tgg agg tgg atg gtc ttt aaa ggg gaa att | 1507 |
| Thr Tyr Met Leu Glu Lys Trp Arg Trp Met Val Phe Lys Gly Glu Ile | |
| 455 460 465 | |
| ccc aaa gac cag tgg atg aaa aag tgg tgg gag atg aag cga gag ata | 1555 |
| Pro Lys Asp Gln Trp Met Lys Lys Trp Trp Glu Met Lys Arg Glu Ile | |
| 470 475 480 | |
| gtt ggg gtg gtg gaa cct gtg ccc cat gat gaa aca tac tgt gac ccc | 1603 |
| Val Gly Val Val Glu Pro Val Pro His Asp Glu Thr Tyr Cys Asp Pro | |
| 485 490 495 500 | |
| gca tct ctg ttc cat gtt tct aat gat tac tca ttc att cga tat tac | 1651 |
| Ala Ser Leu Phe His Val Ser Asn Asp Tyr Ser Phe Ile Arg Tyr Tyr | |

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| aca agg acc ctt tac caa ttc cag ttt caa gaa gca ctt tgt caa gca | | | 1699 |
| Thr Arg Thr Leu Tyr Gln Phe Gln Phe Gln Glu Ala Leu Cys Gln Ala | | | |
| 520 | 525 | 530 | |
| gct aaa cat gaa ggc cct ctg cac aaa tgt gac atc tca aac tct aca | | | 1747 |
| Ala Lys His Glu Gly Pro Leu His Lys Cys Asp Ile Ser Asn Ser Thr | | | |
| 535 | 540 | 545 | |
| gaa gct gga cag aaa ctg ttc aat atg ctg agg ctt gga aaa tca gaa | | | 1795 |
| Glu Ala Gly Gln Lys Leu Phe Asn Met Leu Arg Leu Gly Lys Ser Glu | | | |
| 550 | 555 | 560 | |
| ccc tgg acc cta gca ttg gaa aat gtt gta gga gca aag aac atg aat | | | 1843 |
| Pro Trp Thr Leu Ala Leu Glu Asn Val Val Gly Ala Lys Asn Met Asn | | | |
| 565 | 570 | 575 | 580 |
| gta agg cca ctg ctc aac tac ttt gag ccc tta ttt acc tgg ctg aaa | | | 1891 |
| Val Arg Pro Leu Leu Asn Tyr Phe Glu Pro Leu Phe Thr Trp Leu Lys | | | |
| 585 | 590 | 595 | |
| gac cag aac aag aat tct ttt gtg gga tgg agt acc gac tgg agt cca | | | 1939 |
| Asp Gln Asn Lys Asn Ser Phe Val Gly Trp Ser Thr Asp Trp Ser Pro | | | |
| 600 | 605 | 610 | |
| tat gca gac caa agc atc aaa gtg agg ata agc cta aaa tca gct ctt | | | 1987 |
| Tyr Ala Asp Gln Ser Ile Lys Val Arg Ile Ser Leu Lys Ser Ala Leu | | | |
| 615 | 620 | 625 | |
| gga gat aaa gca tat gaa tgg aac gac aat gaa atg tac ctg ttc cga | | | 2035 |
| Gly Asp Lys Ala Tyr Glu Trp Asn Asp Asn Glu Met Tyr Leu Phe Arg | | | |
| 630 | 635 | 640 | |
| tca tct gtt gca tat gct atg agg cag tac ttt tta aaa gta aaa aat | | | 2083 |
| Ser Ser Val Ala Tyr Ala Met Arg Gln Tyr Phe Leu Lys Val Lys Asn | | | |
| 645 | 650 | 655 | 660 |
| cag atg att ctt ttt ggg gag gag gat gtg cga gtg gct aat ttg aaa | | | 2131 |

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| 665 670 675 | |
| cca aga atc tcc ttt aat ttc ttt gtc act gca cct aaa aat gtg tct | 2179 |
| Pro Arg Ile Ser Phe Asn Phe Phe Val Thr Ala Pro Lys Asn Val Ser | |
| 680 685 690 | |
| gat atc att cct aga act gaa gtt gaa aag gcc atc agg atg tcc cgg | 2227 |
| Asp Ile Ile Pro Arg Thr Glu Val Glu Lys Ala Ile Arg Met Ser Arg | |
| 695 700 705 | |
| agc cgt atc aat gat gct ttc cgt ctg aat gac aac agc cta gag ttt | 2275 |
| Ser Arg Ile Asn Asp Ala Phe Arg Leu Asn Asp Asn Ser Leu Glu Phe | |
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| ctg ggg ata cag cca aca ctt gga cct cct aac cag ccc cct gtt tcc | 2323 |
| Leu Gly Ile Gln Pro Thr Leu Gly Pro Pro Asn Gln Pro Pro Val Ser | |
| 725 730 735 740 | |
| ata tgg ctg att gtt ttt gga gtt gtg atg gga gtg ata gtg gtt ggc | 2371 |
| Ile Trp Leu Ile Val Phe Gly Val Val Met Gly Val Ile Val Val Gly | |
| 745 750 755 | |
| att gtc atc ctg atc ttc act ggg atc aga gat cgg aag aag aaa aat | 2419 |
| Ile Val Ile Leu Ile Phe Thr Gly Ile Arg Asp Arg Lys Lys Lys Asn | |
| 760 765 770 | |
| aaa gca aga agt gga gaa aat cct tat gcc tcc atc gat att agc aaa | 2467 |
| Lys Ala Arg Ser Gly Glu Asn Pro Tyr Ala Ser Ile Asp Ile Ser Lys | |
| 775 780 785 | |
| gga gaa aat aat cca gga ttc caa aac act gat gat gtt cag acc tcc | 2515 |
| Gly Glu Asn Asn Pro Gly Phe Gln Asn Thr Asp Asp Val Gln Thr Ser | |
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| Phe | |
| 805 | |

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RTS-0739US

-77-

PATENT

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